<u>What is Claimed is</u>:

1.   A switching network for receiving and transmitting data packets having both frames which consist of relatively long strings of bytes of for example 40 to 64 bytes and messages which consist of small entities of for example 4,8,12 bytes comprising:

a ring of data ports:

crossbar means for connecting said ports for switching said frames from an input port to an output port:

means for successively interconnecting one port to an adjacent port in said ring for forming a said ring for passing said messages from an input port, successively through intermediate ports to a destination output port, said frames and messages being processed simultaneously.

2.   A switching network as in Claim 1 including parser means for separating said frames from said messages to form two separate data streams.

3.   A switching network as in Claim 1 including clock means for moving said messages one port for every clock pulse.

4.   A switching network as in Claim 1 including gate means associated with each said port for allowing a message into a port only if no other data is present in said port.

6